

NPDES Permit No. IL0021989

Illinois Environmental Protection Agency

Division of Water Pollution Control

1021 North Grand Avenue East

Post Office Box 19276

Springfield, Illinois 62794-9276

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM

Reissued (NPDES) Permit

Expiration Date: July 31, 2016

Issue Date: June 28, 2011

Effective Date: August 1, 2011

Name and Address of Permittee:

Springfield Metro Sanitary District
3017 North 8th Street
Springfield, Illinois 62707

Facility Name and Address:

Spring Creek STP
3017 North 8th Street
Springfield, Illinois
(Sangamon County)

Receiving Waters: Sangamon River

In compliance with the provisions of the Illinois Environmental Protection Act, Title 35 of the Ill. Adm. Code, Subtitle C, Chapter I, and the Clean Water Act (CWA), the above-named Permittee is hereby authorized to discharge at the above location to the above-named receiving stream in accordance with the standard conditions and attachments herein.

Permittee is not authorized to discharge after the above expiration date. In order to receive authorization to discharge beyond the expiration date, the Permittee shall submit the proper application as required by the Illinois Environmental Protection Agency (IEPA) not later than 180 days prior to the expiration date.



Alan Keller, P.E.
Manager, Permit Section
Division of Water Pollution Control

SAK:BDF:09120901.bah

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Effluent Limitations, Monitoring, and Reporting

FINAL

Discharge Number(s) and Name(s): 007 STP Outfall and 012 Tertiary Pond Emergency Spillway Outfall (Existing Facility)

Load limits computed based on a design average flow (DAF) of 20 MGD (design maximum flow (DMF) of 50 MGD).

Excess flow facilities (if applicable) shall not be utilized until the main treatment facility is receiving its maximum practical flow.

From the effective date of this Permit until operational attainment of the proposed facilities, the effluent of the above discharge(s) shall be monitored and limited at all times as follows:

Parameter	LOAD LIMITS lbs/day			CONCENTRATION			Sample Frequency	Sample Type
	Monthly Average	Weekly Average	Daily Maximum	Monthly Average	Weekly Average	Daily Maximum		
	DAF (DMF)*			LIMITS MG/L				
Flow (MGD)							Continuous	RIT
CBOD ₅ **	1668 (4170)		3336 (8340)	10		20	3 Days/Week	Composite
Suspended Solids	2002 (5004)		4003 (10008)	12		24	3 Days/Week	Composite
pH	Shall be in the range of 6 to 9 Standard Units						3 Days/Week	Grab
Fecal Coliform***	Daily Maximum shall not exceed 400 per 100 mL (May through October)						5 Days/Week	Grab
Chlorine Residual***						0.05	5 Days/Week	Grab
Ammonia Nitrogen as (N)								
March-May/Sept.-Oct.	400 (1001)		784 (1960)	2.4		4.7	5 Days/Week	Composite
June-August	267 (667)	667 (1668)	784 (1960)	1.6	4.0	4.7	5 Days/Week	Composite
Nov.-Feb.			751 (1877)			4.5	5 Days/Week	Composite
Boron****			1835 (4587)			11	3 Days/Week	Composite
Total Nitrogen	Monitor Only						1 Day/Month	Composite
Mercury	Monitor Only						1 Day/Month	Grab
				Monthly Average not less than	Weekly Average not less than	Daily Minimum		
Dissolved Oxygen*****								
March - July				---	6.0	5.0	3 Days/Week	Grab
August - February				5.5	4.0	3.5	3 Days/Week	Grab

*Load limits based on design maximum flow shall apply only when flow exceeds design average flow.

**Carbonaceous BOD₅ (CBOD₅) testing shall be in accordance with 40 CFR 136.

***See Special Condition 8.

****See Special Condition 19

*****Dissolved Oxygen monitoring shall not be required when the Sangamon River stage exceeds the 25-year flood elevation of 525.11 feet based on the NGVD29 datum.

Flow shall be reported on the Discharge Monitoring Report (DMR) as monthly average and daily maximum.

Fecal Coliform shall be reported on the DMR as a daily maximum value.

pH shall be reported on the DMR as minimum and maximum value.

Chlorine Residual shall be reported on DMR as daily Maximum value.

Dissolved oxygen shall be reported on the DMR as a minimum value.

Total Nitrogen and Mercury shall be reported on the DMR as daily maximum

No combined sewage from clarifiers 2 and 3 shall discharge through Discharge Number 007 except during emergency situations. All flows through Discharge Numbers 007 and 012 shall comply with the requirements on this page.

For Discharge Number 012, the total flow in million gallons shall be reported on the Discharge Monitoring Report (DMR) in the quantity maximum column.

For Discharge Number 012, report the number of days of discharge in the comments section of the DMR.

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Effluent Limitations, Monitoring, and Reporting

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Discharge Number(s) and Name(s): 007 STP Outfall (Proposed Plant)

Load limits computed based on a design average flow (DAF) of 32 MGD (design maximum flow (DMF) of 80 MGD).

Excess flow facilities (if applicable) shall not be utilized until the main treatment facility is receiving its maximum practical flow.

From operational attainment of the proposed facilities of this Permit until the expiration date, the effluent of the above discharge(s) shall be monitored and limited at all times as follows:

Parameter	LOAD LIMITS lbs/day DAF (DMF)*			CONCENTRATION LIMITS MG/L			Sample Frequency	Sample Type
	Monthly Average	Weekly Average	Daily Maximum	Monthly Average	Weekly Average	Daily Maximum		
Flow (MGD)							Continuous	RIT
CBOD ₅ **	2669 (6672)		5338 (13344)	10		20	5 days/week	Composite
Suspended Solids	3203 (8006)		6405 (16013)	12		24	5 days/week	Composite
pH	Shall be in the range of 6 to 9 Standard Units						5 days/week	Grab
Fecal Coliform***	Daily Maximum shall not exceed 400 per 100 mL (May through October)						5 days/week	Grab
Chlorine Residual						0.05	***	Grab
Ammonia Nitrogen as (N)								
March-May/Sept.-Oct.	400 (1001)	1014 (2535)	1254 (3136)	1.5	3.8	4.7	5 days/week	Composite
June-August	400 (1001)	1014 (2535)	1254 (3136)	1.5	3.8	4.7	5 days/week	Composite
Nov.-Feb.	1068 (2669)		1201 (3002)	4.0		4.5	5 days/week	Composite
Phosphorus	267 (667)			1.0			5 days/week	Composite
Boron			2936 (7339)			11	3 days/week	Composite
Total Nitrogen	Monitor Only						1 Day/Month	Composite
Mercury	Monitor Only						1 Day/Month	Grab
				Monthly Average not less than	Weekly Average not less than	Daily Minimum		
Dissolved Oxygen								
March - July				---	6.0	5.0	5 days/week	Grab
August - February				5.5	4.0	3.5	5 days/week	Grab

*Load limits based on design maximum flow shall apply only when flow exceeds design average flow.

**Carbonaceous BOD₅ (CBOD₅) testing shall be in accordance with 40 CFR 136.

***See Special Condition 8.

****Dissolved Oxygen monitoring shall not be required when the Sangamon River stage exceeds the 25-year flood elevation of 525.11 feet based on the NGVD29 datum.

Flow shall be reported on the Discharge Monitoring Report (DMR) as monthly average and daily maximum.

Fecal Coliform shall be reported on the DMR as a daily maximum value.

pH shall be reported on the DMR as minimum and maximum value.

Chlorine Residual shall be reported on DMR as daily Maximum value.

Dissolved oxygen shall be reported on the DMR as a minimum value.

Total Nitrogen and Mercury shall be reported on the DMR as daily maximum.

No combined sewage from the clarifiers shall discharge through Discharge Number 007 except during emergency situations. All flows through Discharge Numbers 007 and 012 shall comply with the requirements on this page.

For Discharge Number 012, the total flow in million gallons shall be reported on the Discharge Monitoring Report (DMR) in the quantity maximum column and the number of days of discharge shall be reported in the comments section of the DMR.

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Effluent Limitations, Monitoring, and Reporting

FINAL

Discharge Number(s) and Name(s): 013 Treated Combined Sewage Outfall (Flows up to 133 MGD)

These flow facilities shall not be utilized until the main treatment facility is receiving its maximum practical flow.

From the effective date of this Permit until the expiration date, the effluent of the above discharge(s) shall be monitored and limited at all times as follows:

		CONCENTRATION		
		<u>LIMITS mg/L</u>		
Parameter		Monthly Average	Sample Frequency	Sample Type
Total Flow (MG)	See Below		Daily When Discharging	Continuous
BOD ₅		Report	Daily When Discharging	Grab
Suspended Solids		Report	Daily When Discharging	Grab
Fecal Coliform	Daily Maximum Shall Not Exceed 400 per 100 mL		Daily When Discharging	Grab
pH	Shall be in the range of 6 to 9 Standard Units		Daily When Discharging	Grab
Chlorine Residual		0.75	Daily When Discharging	Grab

Total flow in million gallons shall be reported on the Discharge Monitoring Report (DMR) in the quantity maximum column.

Report the number of days of discharge in the comments section of the DMR.

Fecal Coliform shall be reported on the DMR as daily maximum.

Chlorine Residual shall be reported on the DMR as a monthly average concentration.

pH shall be reported on the DMR as a minimum and a maximum.

BOD₅ and Suspended Solids shall be reported on the DMR as a monthly average concentration.

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Influent Monitoring, and Reporting

The influent to the plant shall be monitored as follows:

Parameter	Sample Frequency	Sample Type
Flow (MGD)	Continuous	RIT*
BOD ₅	5 days/week	Composite
Suspended Solids	5 days/week	Composite

*Recording, Indicating, Totalizing.

Influent samples shall be taken at a point representative of the influent.

Flow (MGD) shall be reported on the Discharge Monitoring Report (DMR) as monthly average and daily maximum.

BOD₅ and Suspended Solids shall be reported on the DMR as a monthly average concentration.